

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A computer implemented method, comprising:  
receiving user input specifying a warping tool, the warping tool having a tool perimeter having a shape and a size, the warping tool having one or more associated tool vectors, each of the tool vectors originating at a mesh point defined by a tool mesh associated with the warping tool, the user input specifying one or more of the shape of the tool perimeter, the tool mesh, and the associated tool vectors, wherein the tool perimeter defines a region of influence for the warping tool;  
receiving user input moving the warping tool within an image;  
applying the warping tool, in response to user input, to the image; and  
modifying one or more distortion vectors for the image in response to the application of the warping tool, the one or more distortion vectors being within the region of influence when the warping tool is applied, the one or more distortion vectors being modified based at least in part on the one or more tool vectors.
2. (Previously Presented) The method of claim 1, further comprising:  
modifying one or more regions of the image using the one or more distortion vectors.
3. (Previously Presented) The method of claim 2 further comprising:  
repeatedly applying the warping tool and modifying image regions to produce a warping effect.
4. (Original) The method of claim 2, further comprising:  
displaying a representation of the modified image.

5. (Original) The method of claim 1, wherein receiving user input specifying the warping tool comprises:

receiving user input specifying the tool mesh.

6. (Previously Presented) The method of claim 1, wherein receiving user input specifying the warping tool comprises:

receiving user input defining a strength and/or direction of the one or more associated tool vectors.

7. (Original) The method of claim 6, wherein receiving user input defining the strength and/or direction comprises:

receiving user input defining a rotationally asymmetric distribution for the strengths.

8. (Original) The method of claim 6, wherein receiving user input defining the strength and/or direction comprises:

receiving user input defining a rotationally asymmetric distribution for the directions.

9. (Previously Presented) The method of claim 6, wherein receiving user input defining the strength and/or direction comprises:

receiving user input defining a strength and/or direction that changes with time as the warping tool is applied to the image.

10. (Previously Presented) The method of claim 1, wherein receiving user input specifying the warping tool comprises:

receiving user input specifying a rotationally asymmetric shape of the tool perimeter.

11. (Previously Presented) The method of claim 1, wherein receiving user input specifying the warping tool comprises:

receiving user input specifying the shape of the tool perimeter.

12. (Previously Presented) The method of claim 1, wherein receiving user input specifying the warping tool comprises:

receiving user input specifying a shape of the tool perimeter and/or a size that changes with time as the warping tool is applied to the image.

13. (Currently Amended) The method of claim ~~[[11]]~~ 12, wherein receiving user input specifying the shape of the tool perimeter comprises:

receiving user input specifying a triangle, square, hexagon, octagon, rhombus, or parallelepiped.

14. (Previously Presented) The method of claim 1, wherein applying the warping tool comprises:

applying the warping tool in response to user input defining a movement of the warping tool from a first location to a second location relative to the image.

15. (Previously Presented) The method of claim 14, wherein modifying the one or more distortion vectors includes:

calculating a distortion vector for an image region based on the movement of the warping tool and based on one or more of the tool vectors.

16. (Previously Presented) The method of claim 15, wherein applying the warping tool includes:

applying the warping tool using a user specified scale factor, the scale factor being used to scale the strengths associated with the tool vectors.

17. (Previously Presented) A computer program product tangibly embodied in a computer readable medium, the computer program product comprising instructions operable to cause data processing equipment to:

receive user input specifying a warping tool, the warping tool having a tool perimeter having a shape and a size, the warping tool having one or more associated tool vectors, each of the tool vectors originating at a mesh point defined by a tool mesh associated with the warping tool, the user input specifying one or more of the shape of the tool perimeter, the tool mesh, and

the associated tool vectors, wherein the tool perimeter defines a region of influence for the warping tool;

receive user input moving the warping tool within an image;

apply the warping tool, in response to user input, to the image; and

modify one or more distortion vectors for the image in response to the application of the warping tool, the one or more distortion vectors being within the region of influence when the warping tool is applied, the one or more distortion vectors being modified based at least in part on the one or more tool vectors.

18. (Previously Presented) The computer program product of claim 17, further comprising instructions operable to cause the data processing equipment to:

modify one or more regions of the image using the one or more distortion vectors.

19. (Previously Presented) The computer program product of claim 18, further comprising instructions operable to cause the data processing equipment to:

repeat the application of the warping tool and the modification of the image regions to produce a warping effect.

20. (Original) The computer program product of claim 18, further comprising instructions operable to cause the data processing equipment to:

display a representation of the modified image.

21. (Original) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying the tool mesh.

22. (Previously Presented) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a strength and/or direction of the one or more associated tool vectors.

23. (Original) The computer program product of claim 22, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a rotationally asymmetric distribution for the strengths.

24. (Original) The computer program product of claim 22, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a rotationally asymmetric distribution for the directions.

25. (Previously Presented) The computer program product of claim 22, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input defining a strength and/or direction that changes with time as the warping tool is applied to the image.

26. (Previously Presented) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying a rotationally asymmetric shape of the tool perimeter.

27. (Previously Presented) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying the shape of the tool perimeter.

28. (Previously Presented) The computer program product of claim 17, wherein the instructions to receive user input specifying the warping tool cause the data processing equipment to:

receive user input specifying a shape of the tool perimeter and/or a size that changes with time as the warping tool is applied to the image.

29. (Currently Amended) The computer program product of claim ~~[[27]]~~ 28, wherein the instructions to receive user input specifying the shape of the tool perimeter cause the data processing equipment to:

receive user input specifying a triangle, square, hexagon, octagon, rhombus, or parallelepiped.

30. (Previously Presented) The computer program product of claim 17, wherein the instructions to apply the warping tool cause the data processing equipment to:

apply the warping tool in response to user input defining a movement of the warping tool from a first location to a second location relative to the image.

31. (Previously Presented) The computer program product of claim 30, wherein the instructions to modify the one or more distortion vectors cause the data processing equipment to:

calculate a distortion vector for an image region based on the movement of the warping tool and based on one or more of the tool vectors.

32. (Previously Presented) The computer program product of claim 31, wherein the instructions to apply the warping tool cause the data processing equipment to:

applying the warping tool using a user specified scale factor, the scale factor being used to scale the strengths associated with the tool vectors.

33. (Previously Presented) The method of claim 1, further comprising:

applying a warping effect to one or more pixels in the image using the one or more distortion vectors.

34. (Previously Presented) The computer program product of claim 17, further comprising instructions operable to cause the data processing equipment to:

apply a warping effect to one or more pixels in the image using the one or more distortion vectors.

35. (New) A system comprising:  
a processor;  
a display device operatively coupled to the processor; and  
a computer-readable medium, tangibly storing a computer program product, the computer program product comprising instructions to cause the processor to:

receive user input specifying a warping tool, the warping tool having a tool perimeter having a shape and a size, the warping tool having one or more associated tool vectors, each of the tool vectors originating at a mesh point defined by a tool mesh associated with the warping tool, the user input specifying one or more of the shape of the tool perimeter, the tool mesh, and the associated tool vectors, wherein the tool perimeter defines a region of influence for the warping tool;

receive user input moving the warping tool within an image;  
apply the warping tool, in response to user input, to the image; and  
modify one or more distortion vectors for the image in response to the application of the warping tool, the one or more distortion vectors being within the region of influence when the warping tool is applied, the one or more distortion vectors being modified based at least in part on the one or more tool vectors.

36. (New) The system of claim 35, wherein the computer program product further comprises instructions operable to cause the processor to:

modify one or more regions of the image using the one or more distortion vectors.

37. (New) The system of claim 36, wherein the computer program product further comprises instructions operable to cause the processor to:

repeat the application of the warping tool and the modification of the image regions to produce a warping effect.

38. (New) The system of claim 36, wherein the computer program product further comprises instructions operable to cause the processor to:

display a representation of the modified image.

39. (New) The system of claim 35, wherein the instructions to receive user input specifying the warping tool cause the processor to:

receive user input specifying the tool mesh.

40. (New) The system of claim 35, wherein the instructions to receive user input specifying the warping tool cause the processor to:

receive user input defining a strength and/or direction of the one or more associated tool vectors.

41. (New) The system of claim 40, wherein the instructions to receive user input specifying the warping tool cause the processor to:

receive user input defining a rotationally asymmetric distribution for the strengths.

42. (New) The system of claim 40, wherein the instructions to receive user input specifying the warping tool cause the processor to:

receive user input defining a rotationally asymmetric distribution for the directions.

43. (New) The system of claim 40, wherein the instructions to receive user input specifying the warping tool cause the processor to:

receive user input defining a strength and/or direction that changes with time as the warping tool is applied to the image.

44. (New) The system of claim 35, wherein the instructions to receive user input specifying the warping tool cause the processor to:

receive user input specifying a rotationally asymmetric shape of the tool perimeter.

45. (New) The system of claim 35, wherein the instructions to receive user input specifying the warping tool cause the processor to:

receive user input specifying the shape of the tool perimeter.

46. (New) The system of claim 35, wherein the instructions to receive user input specifying the warping tool cause the processor to:



receive user input specifying a shape of the tool perimeter and/or a size that changes with time as the warping tool is applied to the image.

47. (New) The system of claim 46, wherein the instructions to receive user input specifying the shape of the tool perimeter cause the processor to:

receive user input specifying a triangle, square, hexagon, octagon, rhombus, or parallelepiped.

48. (New) The system of claim 35, wherein the instructions to apply the warping tool cause the processor to:

apply the warping tool in response to user input defining a movement of the warping tool from a first location to a second location relative to the image.

49. (New) The system of claim 48, wherein the instructions to modify the one or more distortion vectors cause the processor to:

calculate a distortion vector for an image region based on the movement of the warping tool and based on one or more of the tool vectors.

50. (New) The system of claim 49, wherein the instructions to apply the warping tool cause the processor to:

applying the warping tool using a user specified scale factor, the scale factor being used to scale the strengths associated with the tool vectors.

51. (New) The system of claim 35, wherein the computer program product further comprises instructions operable to cause the processor to:

apply a warping effect to one or more pixels in the image using the one or more distortion vectors.